**PYTHON-WORKSHEET 2**

1. Which of the following is not a core datatype in python?

b) struct

2. Which of the following is an invalid variable name in python?

c) 1\_no

3.Which one of the following is a keyword in python?

A) in

4. In which of the following manner are the operators of the same precedence executed in python?

B) BODMAS

5.Arrange the following in decreasing order of the precedence when they appear in an expression in python?

i) Multiplication ii) Division iii) Exponential iv) Parentheses

C) iv – iii – ii – i

6. (28//6)\*\*3/3%3 = ?

C) 0.3333..

7.Which of the following is not equal to x16 ?

A) x\*\*4\*\*4

8. a = input(“Enter an integer”). What will be the data type

B)str

9.Which of the following statements are correct?

A) Division and multiplication have same precedence in python

B) Python’s operators’ precedence is based on PEDMAS

C) Python’s operators’ precedence is based on VBODMAS

D) In case of operators’ having same precedence, the one on the left side is executed first.

B) Python’s operators’ precedence is based on PEDMAS

10. Which of the following is(are) valid statement(s) in python?

A) abc = 1,000,000 B) a b c = 1000 2000 3000 C) a,b,c = 1000, 2000, 3000 D) a\_b\_c = 1,000,000

1. C) D)

11.Differentiate between a list, tuple, set and dictionary.

| **LIST** | **SET** | **TUPLE** | **Dictionary** |
| --- | --- | --- | --- |
| Lists is Mutable | Set is Immutable | Tuple is Immutable | Dictionary is Mutable |
| It is Ordered collection of items | It is Unordered collection of items | It is Ordered collection of items | It is Unordered collection of items |
| Items in list can be replaced or changed | Items in set cannot be changed or replaced | Items in tuple cannot be changed or replaced | Items in a dictionary can be replaced or changed |

12. Are strings mutable in python? Suppose you have a string “I+Love+Python”, write a small code to replace ‘+’ with space in python.

a='I+LOVE+PYTHON'

a=a.replace('+',' ')

print(a)

13.What does the function **ord()** do in python? Explain with example. Also, write down the function for getting the datatype of a variable in python.

The **ord() function** in Python accepts a string of length 1 as an argument and returns the unicode code point representation of the passed argument. For example ord('B') returns 66 which is a unicode code point value of character ‘B’.

Example:-

print(“The ASCII value of 9 is”, ord(‘9))

Output: The ASCII value of 9 is 57

14.Write a python program to solve a quadratic equation of the form 𝑎𝑥2+𝑏𝑥+𝑐=0. Where a, b and c are to be taken by user input. Handle the erroneous input, such as ‘a’ should not be equal to 0.

import cmath

a = 1

b = 5

c = 6

# calculate the discriminant

d = (b\*\*2) - (4\*a\*c)

# find two solutions

S1 = (-b-cmath.sqrt(d))/(2\*a)

S2 = (-b+cmath.sqrt(d))/(2\*a)

print('The solution are {0} and {1}'.format(S1,S2))

Output:

Enter a: 1

Enter b: 5

Enter c: 6

The solutions are (-3+0j) and (-2+0j)

15. Write a python program to find the sum of first ‘n’ natural numbers without using any loop. Ask user to input the value of ‘n’.

num = int(input("Enter the value of n: "))

sum = 0

if num <= 0:

print("Enter a whole positive number!")

else:

while num > 0:

sum = sum + num

num = num - 1;

print("Sum of first", num, "natural numbers is: ", sum)

Output:

Enter the value of n: 8

Sum of first 0 natural numbers is: 36